

Docket No. LEWI-005

## APPLICATION

5

**FOR UNITED STATES LETTERS PATENT**

10

## SPECIFICATION

15

TO ALL WHOM IT MAY CONCERN:

20 BE IT KNOWN THAT I, **Cynthia L. Lewis**, a citizen of the United States,  
have invented a new and useful refrigerator shelf liner system of which the following  
is a specification:

## **Refrigerator Shelf Liner System**

5

### **CROSS REFERENCE TO RELATED APPLICATIONS**

Not applicable to this application.

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

### **STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT**

Not applicable to this application.

### **BACKGROUND OF THE INVENTION**

#### **Field of the Invention**

20

The present invention relates generally to refrigerators and more specifically it relates to a refrigerator shelf liner system for protecting the upper surfaces of refrigerator shelves.

25

#### **Description of the Prior Art**

Examples of patented devices which are related to the present invention include U.S. Patent 5,046,604 to Forhetz et al.; U.S. Patent 4,465,729 to Cancio et al.; U.S. Patent 5,874,371 to Owen; and U.S. Patent 6,245,697 to Conrad et al.

While these devices may be suitable for the particular purpose to which they address, they are not as suitable for protecting the upper surfaces of refrigerator shelves. Conventional refrigerator shelves are not designed for easy and simple cleaning.

In these respects, the refrigerator shelf liner system according to the present invention substantially departs from the conventional concepts and designs of the prior art, and in so doing provides an apparatus primarily developed for the purpose of protecting the upper surfaces of refrigerator shelves.

10

卷之三

## SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of  
5 refrigerator shelves now present in the prior art, the present invention provides a new  
refrigerator shelf liner system construction wherein the same can be utilized for  
protecting the upper surfaces of refrigerator shelves.

The general purpose of the present invention, which will be described  
10 subsequently in greater detail, is to provide a new refrigerator shelf liner system that  
has many of the advantages of the attempted solutions mentioned heretofore and many  
novel features that result in a new refrigerator shelf liner system which is not  
anticipated, rendered obvious, suggested, or even implied by any of the prior art, either  
alone or in any combination thereof.

15 To attain this, the present invention generally comprises a rear member having  
a rear surface, a plurality of adhesive strips attached to the rear surface, a first arm and  
a second arm extending from the distal ends of the rear member, a cover attached to  
the rear member, and a roll of protective material rotatably retained between the arms.

20 The adhesive strips secure the rear member to the interior wall of a refrigerator above a  
shelf to be protected by a sheet dispensed from the roll. The roll preferably contains a  
plurality of protective sheets separated by a line of perforations.

25 There has thus been outlined, rather broadly, the more important features of the  
invention in order that the detailed description thereof may be better understood, and  
in order that the present contribution to the art may be better appreciated. There are  
additional features of the invention that will be described hereinafter and that will form  
the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other 5 embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

A primary object of the present invention is to provide a refrigerator shelf liner 10 system that will overcome the shortcomings of the prior art devices.

A second object is to provide a refrigerator shelf liner system for protecting the 15 upper surfaces of refrigerator shelves.

Another object is to provide a refrigerator shelf liner system that may be utilized within various styles and sizes of refrigerators.

An additional object is to provide a refrigerator shelf liner system that may be utilized within existing conventional refrigerators.

A further object is to provide a refrigerator shelf liner system that may be utilized upon various other devices such as microwaves, freezers and similar devices.

Another object is to provide a refrigerator shelf liner system that reduces the 25 amount of labor required to clean a refrigerator.

A further object is to provide a refrigerator shelf liner system that improves the interior appearance of a refrigerator.

Other objects and advantages of the present invention will become obvious to the reader and it is intended that these objects and advantages are within the scope of the present invention.

5 To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

10

00024200-021602

## BRIEF DESCRIPTION OF THE DRAWINGS

Various other objects, features and attendant advantages of the present  
5 invention will become fully appreciated as the same becomes better understood when  
considered in conjunction with the accompanying drawings, in which like reference  
characters designate the same or similar parts throughout the several views, and  
wherein:

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

FIG. 1 is an upper perspective view of the present invention secured within a  
refrigerator.

FIG. 2 is a front view of the present invention secured within a refrigerator.

15 FIG. 3 is an upper perspective view of the present invention.

FIG. 4 is an upper perspective view of the present invention with the cover  
opened.

20 FIG. 5 is a front view of the present invention with the cover opened.

FIG. 6 is an exploded upper perspective view of the present invention.

25 FIG. 7 is an upper perspective view of the present invention with a sheet  
removed from thereof.

FIG. 8 is an upper perspective view of the present invention with a sheet  
partially positioned upon an upper surface of a shelf.

FIG. 9 is a rear upper perspective view illustrating the adhesive strips.

FIG. 10 is a cutaway perspective view of the sheet structure.

5

100-2620-0240-2000

## DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1 through 10 illustrate a refrigerator shelf liner system 10, which comprises a rear member 20 having a rear surface 24, a plurality of adhesive strips 26 attached to the rear surface 24, a first arm 30 and a second arm 40 extending from the distal ends of the rear member 20, a cover 50 attached to the rear member 20, and a roll 70 of protective material rotatably retained between the arms. The adhesive strips 26 secure the rear member 20 to the interior wall of a refrigerator 12 above a shelf 14 to be protected by a sheet 74 dispensed from the roll 70. The roll 70 preferably contains a plurality of protective sheets 74 separated by a line of perforations 76.

As shown in Figures 4 and 5 of the drawings, the rear member 20 is comprised of an elongate structure having a length approximately the width of the shelf 14 within the refrigerator 12. The rear member 20 is preferably comprised of a flat structure, however, various other structures may be utilized to construct the rear member 20. The rear member 20 has a front surface 22 and a rear surface 24. A plurality of adhesive strips 26 are attached to the rear surface 24 for securing the rear member 20 to an interior wall of the refrigerator 12. Various other securing means may be utilized to attach the rear member 20 to the interior of the refrigerator 12.

A first arm 30 and a second arm 40 are preferably attached to opposing distal ends of the rear member 20 as shown in Figures 4 and 5 of the drawings. The arms 30, 40 extend substantially orthogonally from the rear member 20 as best shown in Figure 5 of the drawings. The arms 30, 40 preferably have a curved edge 32, 42 as best shown in Figure 4 of the drawings. The arms 30, 40 further preferably include a

straight upper edge 34, 44 as shown in Figure 4 of the drawings. Various other shapes may be utilized to construct the arms 30, 40 as can be appreciated.

As shown in Figure 5 of the drawings, a first support member 36 is attached to 5 an inner surface of the first arm 30. The first support member 36 is preferably comprised of a circular structure positionable within the lumen 72 of the roll 70 for rotatably supporting the roll 70. The first support member 36 may have various other shapes as can be appreciated. The first support member 36 preferably has a length sufficient to prevent accidental removal of the roll 70 from between the arms 30, 40.

10 As shown in Figure 5 of the drawings, a second support member 46 is attached to an inner surface of the second arm 40 in opposition and coaxially with the first support member 36. The second support member 46 is preferably comprised of a circular structure positionable within the lumen 72 of the roll 70 for rotatably supporting the roll 70. The second support member 46 may have various other shapes as can be appreciated. The second support member 46 preferably has a length sufficient to prevent accidental removal of the roll 70 from between the arms 30, 40.

15 As shown in Figures 2 through 9 of the drawings, a cover 50 is attached to the rear member 20. The cover 50 is preferably pivotally attached to the rear member 20 by a hinge 56 as shown in Figure 9 of the drawings. The cover 50 has a flat portion 52 that corresponds to the upper edges 34, 44 of the arms 30, 40. The cover 50 also has a curved portion 54 that corresponds to the curved edges 32, 42 of the arms 30, 40. The cover 50 may be non-movably attached to the rear member 20, however, the cover 50 20 being pivotally attached allows for easy removal and installation of the roll 70 between the arms 30, 40. The cover 50 preferably has a cutting edge 60 comprised of one or more blade members for cutting a sheet 74 from the roll 70. The cover 50 preferably overlaps upon the arms 30, 40 as shown in Figures 7 and 8 of the drawings.

As shown in Figure 6 of the drawings, the roll 70 is an elongate structure approximately the width of the rear member 20. The roll 70 is removably positionable between the arms 30, 40 by expanding the arms 30, 40 outwardly from one another and positioning the lumen 72 of the roll 70 upon the support members 36, 46.

5

The roll 70 may contain a solid sheet 74 of material that is cut into separate sheets 74 with the cutting edge 60 or the roll 70 may contain a plurality of sheets 74 separated by a plurality of perforations 76. The dispensed sheet 74 from the roll 70 preferably has a length and a width sufficient to cover 50 at least a majority of the upper surface of a shelf 14 as shown in Figure 1 of the drawings.

□ 10  
□ 11  
□ 12  
□ 13  
□ 14  
□ 15  
□ 16  
□ 17  
□ 18  
□ 19  
□ 20

As shown in Figure 10 of the drawings, each sheet 74 upon the roll 70 preferably has a non-permeable layer 77 on the bottom and an absorbent layer 78 secured to the non-permeable layer 77. The non-permeable layer 77 prevents fluids from passing through the sheet 74 while the absorbent layer 78 absorbs a specific volume of fluid to prevent the fluid from dispersing off the sheet 74. The non-permeable layer 77 may be comprised of various materials such as but not limited to vinyl, plastic or the like. The permeable layer may be comprised of any material capable of absorbing fluids such as but not limited to paper, cloth and the like. Each sheet 74 further preferably includes an odor absorbent material 79 such as but not limited to baking soda, charcoal and the like. Finally, each sheet 74 may have a specific desired color and design to coordinate with the refrigerator 12 and the kitchen.

In use, the user first secures the rear member 20 to the rear interior wall above a shelf 14 within the refrigerator 12. The user then secures a roll 70 between the arms 30, 40 as shown in Figures 3 and 6 of the drawings. The user then pulls upon the leading sheet 74 from the roll 70 thereby causing the roll 70 to rotate upon the support members 36, 46. The user then cuts the sheet 74 to the desired length with the cutting edge 60 or by tearing along the perforations 76. The user then lays the sheet 74 upon

the upper surface of the shelf 14 to protect the shelf 14 from spillage of fluids and material. The user periodically will remove and dispose of the sheet 74 followed by repeating the above steps.

5 As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed to be within the expertise of those skilled in the art, and all equivalent structural variations and relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

10  
15 Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and  
20 equivalents may be resorted to, falling within the scope of the invention.